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[US/US]; 1109 Loch Lomond Court, Arlington, TX 76012 (US). **MILDENSTEIN, Stephen, E.** [US/US]; 140 Frank Lane, Keller, TX 76248 (US).

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(74) Agents: **WALTON, James, E.** et al.; Hill & Hunn, LLP, Suite 1440, 201 Main Street, Fort Worth, TX 76102 (US).

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(71) Applicant (*for all designated States except US*): **BELL HELICOPTER TEXTRON INC.** [US/US]; P.O. Box 482, Fort Worth, TX 76101 (US).

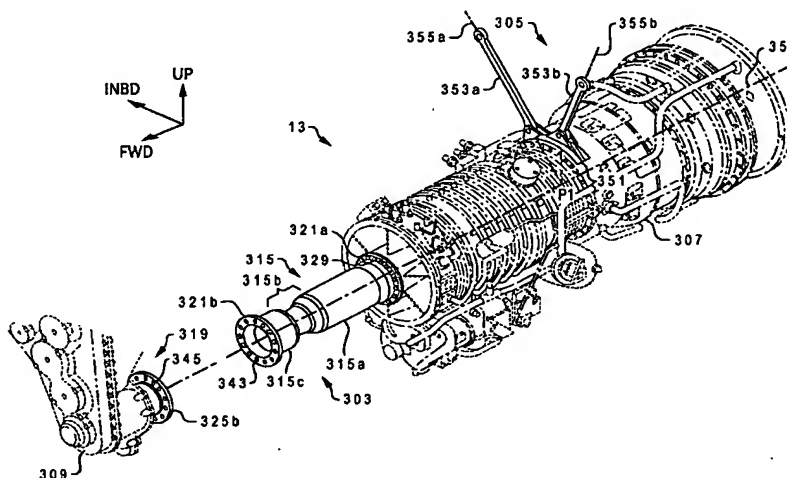
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(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **HOWARD, John, V.**

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: TORSIONALLY DE-COUPLED ENGINE MOUNT SYSTEM



(57) Abstract: A torsionally de-coupled engine mount system (13) for use in tilt rotor aircraft (11) applications is disclosed, in which an engine is mounted at its forward end to a prop rotor gear box by means of a forward mount (303) that is a simple adapter fitting, and at its aft end to a pylon assembly by an aft mount (305) that is a simple bi-pod fitting. The forward mount (303) counteracts forces and moments in six degrees of freedom, but the aft mount (305) only counteracts lateral and vertical loads. The contribution from the engine to the overall dynamic response of the aircraft is tuned by selectively tailoring the size, shape, weight, and material of the forward mount (303). The engine mount system torsionally de-couples the engines from the prop rotors, thereby preventing rotor torque from being induced into the engines. In addition, the contribution from the engines to the overall dynamic response of the aircraft can be tuned by selectively tailoring the size, shape, weight, and material of the forward mounts between the engines and the transmissions.

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) :B64D 27/00

US CL :244/54

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 244/54, 53R, 7R, 6, 17.11, 7C; 60/796, 797; 248/554-557

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
NoneElectronic data base consulted during the international search (name of data base and, where practicable, search terms used)
EAST

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 4,899,959 A (WEILER) 13 FEBRUARY 1990, SEE ENTIRE DOCUMENT	1-5, 12-16
Y	US 6,260,351 A (DELANO ET AL) 17 JULY 2001, SEE ENTIRE DOCUMENT	6-11, 16-19
A	US 3,907,220 A (AMELIO) 23 SEPTEMBER 1975, SEE ENTIRE DOCUMENT	
A	US 6,260,793 A (BALAYN ET AL) 17 JULY 2001, SEE ENTIRE DOCUMENT	
A	US 5,181,675 A (LARDELLIER ET AL) 26 JANUARY 1993, SEE ENTIRE DOCUMENT	

☒ Further documents are listed in the continuation of Box C.
 ☐ See patent family annex.

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"A"	document defining the general state of the art which is not considered to be of particular relevance	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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"O"	document referring to an oral disclosure, use, exhibition or other means		
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 Name and mailing address of the ISA/US
 Commissioner of Patents and Trademarks
 Box PCT
 Washington, D.C. 20231

Facsimile No. (703) 305-3230

Authorized officer

TIEN DINH

Telephone No. (703) 308-4177

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5,823,470 A (CRAIG ET AL) 20 OCTOBER 1998, SEE ENTIRE DOCUMENT	
A	US 6,095,456 A (POWELL) 01 AUGUST 2000, SEE ENTIRE DOCUMENT	